

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/088,591	07/29/2002	Michael Wollitzer	2134-022	6844	
22429	7590 06/27/2005		EXAM	EXAMINER	
LOWE HAUPTMAN GILMAN AND BERNER, LLP 1700 DIAGONAL ROAD SUITE 300/310			NGUYEN,	NGUYEN, TUNG X	
			ART UNIT	PAPER NUMBER	
ALEXANDR	ALEXANDRIA, VA 22314		2829		

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Action Summany	10/088,591	WOLLITZER, MICHAEL			
Office Action Summary	Examiner	Art Unit			
	Tung X. Nguyen	2829			
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the o	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a replection of the period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statuted the period for reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	.136(a). In no event, however, may a reply be tir ply within the statutory minimum of thirty (30) day I will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. (C) (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 06.	<u>June_2005</u> .				
2a) ☐ This action is FINAL . 2b) ☑ Thi	☐ This action is FINAL. 2b)☑ This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposition of Claims					
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.					
4a) Of the above claim(s) <u>9-17</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-8 and 18-20</u> is/are rejected.	S)⊠ Claim(s) 1-8 and 18-20 is/are rejected.				
7) Claim(s) is/are objected to.	•				
8) Claim(s) are subject to restriction and/	or election requirement.				
Application Papers					
9) The specification is objected to by the Examin	er.				
•	0) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.				
Applicant may not request that any objection to the	e drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the corre	ction is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).			
11)☐ The oath or declaration is objected to by the E	examiner. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. § 119(a)-(d) or (f).			
a)⊠ All b)□ Some * c)□ None of:	p 2. 2. 2. 2. 3 (, (-, -, (-,			
1.⊠ Certified copies of the priority documer	nts have been received.				
2. Certified copies of the priority documer	nts have been received in Applicat	ion No			
3. Copies of the certified copies of the pri	ority documents have been receive	ed in this National Stage			
application from the International Burea	au (PCT Rule 17.2(a)).				
* See the attached detailed Office action for a lis	t of the certified copies not receive	ed.			
Attachment(s) 1) ☑ Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO 413)			
2) Notice of References Cited (PTO-692) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate			
3) 🔲 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08	5) Notice of Informal F 6) Other:	Patent Application (PTO-152)			
Paper No(s)/Mail Date	ال ا				

Application/Control Number: 10/088,591

Art Unit: 2829

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-5, 8, 18-20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Godshalk et al. (u.s.p 5,506,515), in view of Burr et al. (u.s.p 5,565,788).

As to claim 1, Godshalk et al. disclose in Figs. 4, 5a-d, a probe for measuring high frequencies comprising: a contact end (118 of figure 4) for contacting planar structures and a co-axial cable end (46 of figure 4) for connection to a co-axial cable (40 of figure 4); a co-planar conductor structure (74 of figure 4) having at least two conductors (70, 72a-b of figure 4) arranged between the contact end (118) and the co-axial cable end (48); a solid dielectric (42 of figure 4) mounting the co-planar conductor structure (74, 95 of figure 4); each conductor (70, 72 a-b of figure 4) in the co-planar conductor structure (74) including a portion formed to be individually free in space and resilient in relation to the dielectric (col. 11, lines 30-35); a respective gap (103 of figure 5d) being formed between each pair of conductors (70, 72a-b) in the co-planar conductor structure from the co-axial cable end to the contact end for obtaining a constant characteristic impedance from the co-axial cable end to the contact end (col. 9, lines 1-15). Godshalk et al. do not teach the dielectric being arranged on the at least one side of the co-planar conductor structure in a central section of the probe. However,

Burr et al. disclose in Figs. 5, 5A, the dielectric being (88 of figure 5A) arranged on the at least one side of the co-planar conductor structure in a central section of the probe (94 of figure 5A), so the dielectric is between and spaced from the co-axial cable end and the contact end (fig. 5) for matching the impedance with the transmission line (col. 5. lines 20-30). Therefore, It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system of Godshalk et al., and provide the dielectric, as taught by Burr et al., for matching the impedance with the transmission line (col. 5, lines 20-30).

Page 3

As to claim 2, Godshalk et al. disclose in Fig. 5d, the respective gap (at the end of cable end) in the region within the dielectric is wider in the region where the conductor structure is mounted on the dielectric than in the portion of the co-planar conductor structure (74, 96 of figure 5d) that is formed to be individually free in space and resilient in relation to the dielectric.

As to claim 3, Godshalk et al. disclose in Figs. 4, 5a-d, the dielectric (42 of figure 4) includes at least one block of quartz.

As to claim 4, Godshalk et al. disclose in Figs. 4, 5a-d, a face of the dielectric (42 of figure 4) includes a metal coating (43 of figure 4) that is electrically connected to the co-planar conductor structure (70, 72a, 72b of figure 4) and has substantially the same shape as the co-planar conductor structure.

As to claims 5, 18 Godshalk et al. disclose in Figs. 4, 5a-d, the dielectric (42 of figure 4) is metallished over its full area on a side (43 of figure 4) thereof remote from a face of the dielectric (42) that contacts the co-planar conductor structure (70, 72a, 72b). Application/Control Number: 10/088,591 Page 4

Art Unit: 2829

As to claim 8, Godshalk et al. disclose in Figs. 4, 5a-d, the dielectric (42 of figure 4) is on both sides of the co-planar conductor structure.

As to claim 19, Godshalk et al. disclose in Figs. 4, 5a-d, each side of the dielectric (42 of figure 4) has a face that contacts the co-planar conductor structure and includes a metal coating that is electrically connected to the co-planar conductor structure and has substantially the same shape as the co-planar conductor structure (fig. 4).

As to claim 20, Godshalk et al. disclose in Figs. 4, 5a-d, the dielectric (42 of figure 4) is metallished over its full area on a side (43 of figure 4) thereof remote from a face of the dielectric (42) that contacts the co-planar conductor structure (70, 72a, 72b).

3. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Godshalk et al. (u.s.p 5,506,515), in view of Roach (u.s.p 5,512,838).

As to claim 6, Godshalk et al., disclose in Figs. 4-5, all of the limitations except for a planar circuit arranged at the co-axial cable end. However, Roach disclose in Fig. 1B, a planar circuit (16 of figure 1B) arranged at the co-axial cable end (30 of figure 1B) for amplifying the signal receiving from the tip of probe. Therefore, It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system of Godshalk, and provide the a planar circuit arranged at he co-axial cable end, as taught by Roach for amplifying the signal receiving from the tip of probe.

As to claim 7, Roach disclose in Fig. 1B, the planar circuit includes at least one active circuit element (32 of figure 1B).

Response to Arguments

Application/Control Number: 10/088,591 Page 5

Art Unit: 2829

4. Applicant's arguments see remark on pages 3-8, filed 6/6/05, with respect to claims 1-8, 18-20 have been fully considered and are persuasive. The final rejection of claims 1-8, 18-20 has been withdrawn.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung X. Nguyen whose telephone number is (571) 272-1967. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (571) 272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN 6/20/05

VINH NGUYEN PRIMARY EXAMINER

A.U. 2829

06/22/05